Description:

The clock generation circuitry (the on-chip oscillator and the comparator that follows it) may fail to generate a reliable clock for the converter under some bipolar power supply conditions.

Work Around:

To ensure proper operation when using the on-chip gate oscillator with the converter powered from bipolar supplies, the following restriction is to be followed:

VD+ must be more positive than +3.2 V and VA- cannot be more negative than -(VD+)-0.3.

For example:

If VD+ = 3.3 V, then VA- cannot be more negative than -(3.3-0.3) or –3.0 V.

If the converter is operated from a bipolar supply of:

VA+ = VD+ = +3.3V and VA- = -3.3 V

or:

VA+ = VD+ = 3.0 V and VA- = -3.0 V

the converter should be driven from an external clock source.